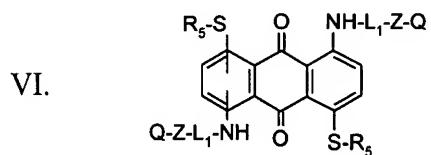
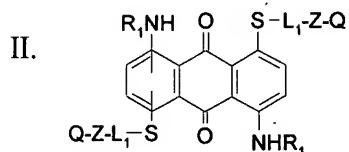


AMENDMENT

1. (Amended) Anthraquinone dye compounds having formula II. or formula VI.:



wherein:

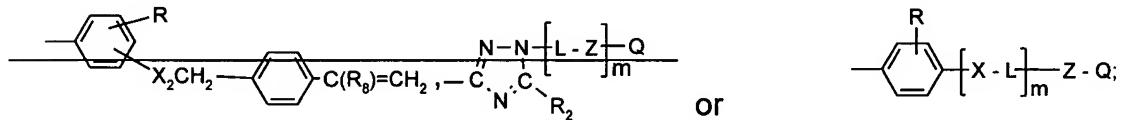
R is hydrogen or 1-3 groups selected from C₁ - C₆-alkyl, C₁ - C₆-alkoxy and halogen;

R₁ is C₁ - C₆-alkyl, substituted C₁ - C₆-alkyl, C₃ - C₈-alkenyl,

C₃ - C₈-cycloalkyl, aryl or -L₁-Z-Q;

~~R₂ is hydrogen, C₁ - C₆-alkyl, substituted C₁ - C₆-alkyl, C₃ - C₈-cycloalkyl or aryl;~~

R₅ is C₁ - C₆-alkyl, substituted C₁ - C₆ alkyl, C₃ - C₈-cycloalkyl, aryl, heteroaryl, -L₁-Z-Q,



~~R₈ is hydrogen or C₁ - C₆-alkyl;~~

X is a covalent bond or a divalent linking group selected from -O-, -S-, -SO₂-, -CO₂-, and -CON(Y)- and -SO₂N(Y)-, wherein Y is hydrogen, C₁- C₆-alkyl, substituted C₁-C₆-alkyl, C₃-C₈-cycloalkyl, C₃-C₈-alkenyl aryl or -L-Z- Q;

~~X₂ is selected from CO₂ and SO₂N(Y₁), wherein Y₁ is hydrogen, C₁-C₆-alkyl, substituted C₁-C₆-alkyl, C₃-C₈-alkenyl, C₃-C₈-cycloalkyl, aryl, heteroaryl or CH₂-p-C₆H₄-C(R₈)=CH₂;~~

L is a divalent linking group selected from C₁-C₈-alkylene, C₁-C₆-alkylene-arylene, arylene, C₁-C₆-alkylene-arylene -C₁-C₆-alkylene, C₃-C₈-cycloalkylene, C₁-C₆-alkylene -C₃-C₈-cycloalkylene -C₁-C₆-alkylene, C₁-C₆-alkylene - Z₁-arylene -Z₁-C₁-C₆-alkylene and C₂-C₆-alkylene-[Z₁-C₂-C₆-alkylene-]_n- wherein Z₁ is -O-, -S- or -SO₂- and n is 1-3;

L₁ is a divalent linking group selected from C₂ - C₆-alkylene, C₁-C₆-alkylene-C₃-C₈-cycloalkylene-C₁-C₆-alkylene, C₁-C₆-alkylene-arylene, C₃-C₈-cycloalkylene, and C₂-C₆-alkylene-[Z₁-C₂-C₆-alkylene-]_n-, wherein Z₁ is -O-, -S- or -SO₂- and n is 1-3;

Z is a divalent group selected from -O-, -S-, -NH-, -N(C₁-C₆-alkyl)-, -N(C₃-C₈ alkenyl)-, -N(C₃-C₈ cycloalkyl)-, -N(aryl)-, -N(SO₂C₁-C₆-alkyl) and -N(SO₂ aryl)-, provided that when Q is a photopolymerizable optionally substituted maleimide radical, Z represents a covalent bond;

Q is an ethylenically-unsaturated, photosensitive polymerizable group; and
m is 0 or 1.

2. (Currently amended) Anthraquinone compounds according to Claim 1 wherein the ethylenically-unsaturated, photosensitive copolymerizable groups represented by Q are selected from the following organic radicals:

Ia -COC(R₁₁)=CH-R₁₂

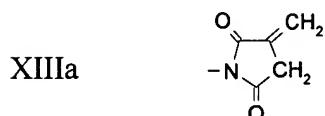
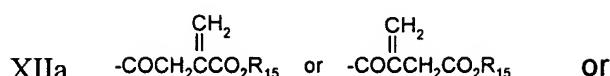
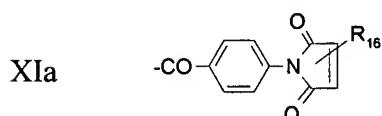
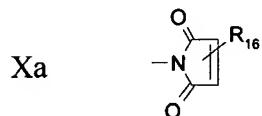
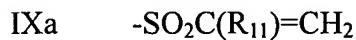
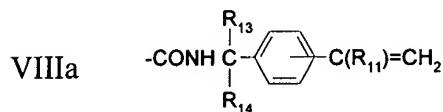
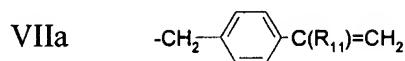
IIa -CONH-COC(R₁₁)=CH-R₁₂

IIIa -CONH-C₁ - C₆-alkylene OCOC(R₁₁) -CH=CH-R₁₂

IVa
$$\begin{array}{c} R_{13} \\ | \\ -CO-C-NHCOC(R_{11})=CH-R_{12} \\ | \\ R_{14} \end{array}$$

Va -COCH=CH-CO₂R₁₅

VIa
$$\begin{array}{c} CO \\ | \\ -CO-\text{C}_6\text{-} \\ | \\ \text{C}_6\text{-} \\ | \\ C(R_{11})=\text{CH}_2 \end{array}$$



wherein:

R₁₁ is hydrogen or C₁-C₆-alkyl;

R₁₂ is hydrogen; C₁-C₆-alkyl; phenyl or phenyl substituted with one or more groups selected from C₁-C₆-alkyl, C₁-C₆-alkoxy, -N(C₁-C₆-alkyl), nitro, cyano, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkanoyloxy and halogen; 1- or 2-naphthyl which may be substituted with C₁-C₆-alkyl or C₁-C₆-alkoxy; 2- or 3-thienyl which may be substituted with C₁-C₆-alkyl or halogen; or 2- or 3-furyl which may be substituted with C₁-C₆-alkyl;

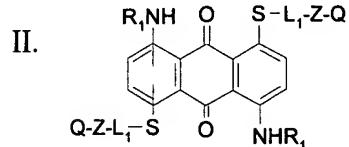
R₁₃ and R₁₄ are hydrogen, C₁-C₆-alkyl, substituted C₁-C₆-alkyl, aryl or may be combined to represent a $[-\text{CH}_2-]_{3-5-}$ radical;

R₁₅ is hydrogen, C₁-C₆-alkyl, substituted C₁-C₆-alkyl, C₃-C₈-alkenyl, C₃-C₈-cycloalkyl or aryl; and

R₁₆ is hydrogen, C₁ - C₆-alkyl or aryl.

3. (Previously canceled)

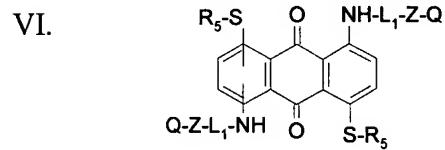
4. (Original) Anthraquinone compounds according to Claim 2 having the formula:



wherein Z is -O-.

Claims 5 – 7 (Previously canceled)

8. (Original) Anthraquinone compounds according to Claim 2 having the formula:



wherein Z is -O-.

Claims 9 – 18 (Previously canceled)

19. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical Ia.

20. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical Ia wherein R₁₁ is hydrogen or methyl and R₁₂ is hydrogen.

21. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa.

22. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa wherein R₁₁ is hydrogen.

23. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIia.

24. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIia wherein R₁₁ is hydrogen or methyl and R₁₃ and R₁₄ are methyl.

Claims 25 and 26 (Previously canceled)

27. (Original) Anthraquinone compounds according to Claim 8 wherein L₁ is -CH₂C(CH₃)₂CH₂- and R₅ is aryl.

Claims 28 - 46 (Canceled)

47. (Original) A coating composition comprising (i) one or more polymerizable vinyl compounds, (ii) one or more of the dye compounds of Claim 1, and (iii) a photoinitiator.

48. (Previously amended) A coating composition comprising (i) one or more polymerizable vinyl compounds, (ii) one or more of the dye compounds of Claim 2 present in a concentration of about 0.05 to 15 weight percent based on the weight of component (i), and (iii) a photoinitiator present in a concentration of about 1 to 15 weight percent based on the weight of the polymerizable vinyl compound(s) present in the coating composition.

49. (Original) A coating composition according to Claim 48 wherein the polymerizable vinyl compounds comprise a solution of a polymeric, polymerizable vinyl compound selected from acrylated and methacrylated polyesters, acrylated and methacrylated polyethers, acrylated and methacrylated epoxy polymers , acrylated or

methacrylated urethanes, and mixtures thereof, in a diluent selected from monomeric acrylate and methacrylate esters.

50. (Previously amended) A polymeric coating composition comprising a polymer of one or more acrylic acid esters, one or more methacrylic acid esters or other copolymerizable vinyl compounds, having copolymerized therein one or more of the dye compounds defined in Claim 1.

51. (Previously amended) A polymeric coating composition comprising a coating of an acrylic polymer of one or more acrylic acid esters, one or more methacrylic acid esters or a mixture thereof having copolymerized therein one or more of the dye compounds defined in Claim 2.

52. (Previously amended) A polymeric coating composition comprising a coating of an unsaturated polyester containing one or more maleate/fumarate residues; one or more monomers which contain one or more vinyl ether groups, one or more vinyl ester groups, or a combination thereof, and, optionally, one or more acrylic or methacrylic acid esters; or a mixture thereof having copolymerized therein one or more of the dye compounds defined in Claim 2.

53. (Previously amended) A polymeric coating according to Claim 51 containing from about 0.05 to 15.0 weight percent of the residue of one or more of the dye compounds based on the weight of the coating.